

ED 400 967

PS 024 652

AUTHOR Ferguson, T.; And Others  
 TITLE (Dys)functional Guilt and Shame in Developmental Perspective.  
 PUB DATE Aug 96  
 NOTE 12p.; Paper presented at the Biennial Meeting of the International Society for the Study of Behavioural Development (14th, Quebec City, Quebec, Canada, August 12-16, 1996).  
 PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)  
 EDRS PRICE MF01/PC01 Plus Postage.  
 DESCRIPTORS Adults; Anger; Child Behavior; \*Child Development; Children; \*Emotional Problems; Emotional Response; Foreign Countries; \*Guilt; Individual Psychology; Interpersonal Relationship; Moods; Moral Development; \*Psychological Patterns  
 IDENTIFIERS Embarrassment; Emotions; \*Pride; \*Shame

## ABSTRACT

Sociologists and psychologists have shown increasing interest in moral emotions such as pride, shame, and guilt, including their developmental role. While these emotions have an important part in normal development, the chronically shame-prone person has feelings of worthlessness, incompetence, and helplessness; a guilt-prone person dwells on imagined wrongs to be undone; and a pride-prone person risks social rejection. This study examined the extent to which various measures of guilt- and shame-proneness in children were differentially related to symptoms thought to be associated with development of internalizing and externalizing symptoms. The study involved both child and adult samples. The child sample consisted of 104 children from 5 to 12 years old, along with their parents. The children were tested, including completion of the Child Attribution and Reaction Survey-Child Version (C-CARS), Children's Interpretations of Interpersonal Distress and Conflict (CIIDC), and the Semi-Structured Clinical Interview for Children (SCIC). Parents completed the Child Behavior Checklist (CBCL). The adult sample consisted of 102 college students in a psychology course. They completed the MMPI-2 and measures dealing with guilt- and shame-proneness. Results showed few indications that non-ruminative forms of guilt-proneness were related to psychological symptoms in either adults or children, but that it is premature to conclude that guilt is primarily adaptive in nature. Projective indicators of guilt were related strongly to shame-proneness, which itself was a salient variable in predicting externalizing symptoms in both children and adults. (Contains 20 references.) (BGC)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

X This document has been reproduced as  
received from the person or organization  
originating it.

☐ Minor changes have been made to  
improve reproduction quality.

• Points of view or opinions stated in this  
document do not necessarily represent  
official OERI position or policy.

ED 400 967

## **(Dys)functional Guilt and Shame in Developmental Perspective**

T. Ferguson, C. Sorenson, R. Bodrero, & \*H. Stegge  
Utah State University, Logan, Utah, United States  
\*Free University, Amsterdam, The Netherlands

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL  
HAS BEEN GRANTED BY

T. J. Ferguson

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

Poster presented at the XIVth Biennial ISSBD Conference, Québec City, August 12-16  
1996. Correspondence regarding this research can be directed to the first author at the  
e-mail address: uf734@cc.usu.edu.

## PURPOSE OF THE RESEARCH

The primary objective of the present study was to assess the extent to which various measures of guilt- and shame-proneness in children and adults were differentially related to symptoms thought to be associated with the development of internalizing and externalizing symptoms.

## BACKGROUND AND SIGNIFICANCE

Interest in moral emotions lay dormant for years in psychology. Recently, however, developmental, social, and clinical psychologists have shown increasing interest in moral emotions, which include pride, shame, and guilt. Psychologists in these different disciplines recognize the critical role that moral emotions play in normal and psychopathogenic development and many of these researchers approach the study of moral emotions from a functionalist perspective. From the functionalist perspective, *any* emotion can serve adaptive purposes (e.g., Barrett, 1995; Magai & McFadden, 1995; Malatesta & Wilson, 1988). Shame, for example, serves as a momentary reminder to the individual of standards of propriety and the behaviors necessary to remain a part of the social group (e.g., Scheff, 1988). Momentary responses of guilt serve as checks on interpersonally harmful impulses, promoting prosocial and inhibiting antisocial behaviors. Situationally-based pride responses signal to the person that he or she has mastered the behavior(s) necessary to achieve standards of excellence. However, prolonged experiences of any of these emotions can be detrimental to the individual's psychological welfare. The chronically shame-prone person feels trapped by a sense of worthlessness, incompetence, and helplessness (e.g., Crowley & Anderson, 1993; Ferguson & Stegge, 1995; Tangney, Burggraf, & Wagner, 1995). The person plagued by guilt ruminates over imagined wrongs to be undone, excessively empathizes with others, and inaccurately overestimates their power in affecting others (see also Zahn-Waxler & Kochanska, 1988). And, the persistently pride-prone person, although possibly able to maintain good feelings about the self, runs the risk of forceful social rejection, inspired by others' feelings of envy or jealousy (Lewis, 1992).

Although researchers in the field have made impressive strides in conceptualizing the adaptive and maladaptive functions of moral emotions, the pace has been slower in providing adequate operationalizations of these constructs. Especially lacking are measurement instruments that can be used across the life-span to measure maladaptive and adaptive forms of guilt and shame. In this presentation, we report the results of several studies that were designed to investigate the usefulness of projective and self-rating methodologies in measuring guilt- and shame-proneness in children, adolescents, and adults. Data have been collected in both the U.S. and the Netherlands. Results for the U.S. samples are reported here.

## METHOD

### CHILD SAMPLE

Children ranging from 5-12 years-old were tested ( $n = 104$ ) in addition to their parents (90% mothers).

Each child completed:

- a semi-structured, nonprojective interview designed to assess guilt- and shame-proneness, entitled the Child Attribution and Reaction Survey - Child Version; C-CARS (Stegge & Ferguson, 1990). Guilt- and shame-proneness scores from the C-CARS reflected an average rating (5-point scale) across eight scenarios for responses prekeyed to represent the two emotions. [the C-CARS was modeled after the Test of Self-Conscious Affect measure developed by Tangney, Wagner, and Gramzow (1989); see below].

Two examples of the scenarios in which the child is queried about guilt- and shame-proneness are:

You're at school in your art class. You and your friends are working on a project and talking. Your friend tells a really funny joke. You start laughing so hard that you wet your pants.

"Are you the kind of girl/boy who would feel embarrassed?" (shame);

"Are you the kind of girl/boy who would later feel sorry" (guilt).

You are hurrying home one day to watch your favorite television program. You see your little brother/sister outside. S/he is sitting on the sidewalk crying. S/he dropped a bag of marbles and they are rolling all over the place. You don't stop to help him/her. You just keep on walking towards home.

"Are you the kind of boy/girl who would think, 'I am a mean kid for not helping?' (shame)

"Are you the kind of boy/girl who would feel you did something wrong?" (guilt).

- the Children's Interpretations of Interpersonal Distress and Conflict (CIIDC), which is a more projective measure of emotional distress, developed by Zahn-Waxler, Kochanska, Krupnick, & Mayfield (1988). In the Zahn-Waxler et al. procedure, children see a series of ambiguous photographs (e.g., a photograph of a mother leaving the room followed by a photograph of a child kneeling on the couch, looking outside a window, presumably watching the mother leave). Children then answer a series of questions about what the child in each photograph is thinking and feeling. Among other scores, children's tendency to report various themes of guilt can be derived from their open-ended responses. Projective guilt scores were derived from the CIIDC by two raters using the Zahn-Waxler et al. coding manual.
- the Semi-Structured Clinical Interview for Children (SCIC - Ages 6-11; Achenbach & McConaughy, 1987). From the SCIC, scores were computed reflecting symptoms of internalization (e.g., anxiety and withdrawal) and components of externalization (e.g., aggression, problems with peers).

The children's parents also completed the Child Behavior Checklist (CBCL), using the age-appropriate parent report form. From the CBCL, scores were also computed reflecting parents' perceptions of their child's

expression of symptoms of internalization (e.g., anxiety and withdrawal) and components of externalization (e.g., aggression, problems with peers).

## ADULT SAMPLE

Complete information was available from 102 college students enrolled in an introductory psychology course (34 males, 68 females). Students were given a package of questionnaires to fill out in return for extra credit.

Students completed:

- 201 items selected from the MMPI-2, from which we derived scores for obvious depression, anxiety, anger, amorality, and ego strength.
- the Symptom Checklist-90-Revised (SCL-90-R, Derogatis, 1983), from which we derived scores for depression, anxiety, and hostility
- a structured, scenario-based measure of guilt- and shame-proneness modeled after Tangney, Wagner, and Gramzow (1989). In Tangney et al.'s Test of Self-Conscious Affect (TOSCA), participants read 15 scenarios, each depicting a person committing some untoward action (10 scenarios) or achieving success (5 scenarios). For each scenario, participants rate on a 5-point scale how likely (1 = not likely; 5 = very likely) they would react in ways prescored to represent guilt, shame, detachment, externalization, alpha pride, and beta pride. In the TOSCA, guilt has a nonruminative quality (cf. Crowley & Ferguson, 1994), representing expressions of regret, reparation or atonement, apology, or deservingness of punishment (e.g., "You would return the favor as quickly as you could."), whereas shame reflects self-criticism, withdrawal, or isolation (e.g., "You would feel stupid.").

## SAMPLE ITEM FROM THE TOSCA

A. You make plans to meet a friend for lunch. At 5 o'clock, you realize you stood him up.

1. You would try to avoid your friend. (shame-prone response)
  2. You wouldn't call and just figure that your friend will understand.
  3. You would later call the friend and offer to meet him for lunch the next day. (guilt-response)
  4. You would explain to your friend that your boss distracted you just before lunch.
- a more projective measure of guilt- and shame-proneness, entitled the Affective Sentence Completion test (Ferguson, Sorenson, & Eyre, 1996). In the ASC, students are presented with 45 sentence stems (e.g., "I feel worthless \_\_\_\_\_", "When I lie \_\_\_\_\_"), which they complete with the first thought that comes to mind. After completing each sentence stem, students choose which of 18 emotions best describes how the statement makes them feel. Guilt-proneness scores were derived by averaging the number of times the student cited guilt or anxiety as the felt emotion. Shame-proneness scores represented the average number of times the student cited feeling ashamed, stupid, or self-conscious.

## SAMPLE ITEMS FROM AFFECTIVE SENTENCE COMPLETION TASK

**Directions:** Please complete the sentences that are started below. Put the first thought that comes into your head. Please don't change your answer after you have written your first thought down (even if it seems silly or irrelevant). Directly after each sentence, there will be another phrase that states, "This makes me feel..." Please list the emotion (from the given list) that best describes your feelings about what you just said. You can use any emotion word more than once, **but only list one emotion per sentence.**

Angry	Anxious	Ashamed	Depressed
Embarrassed	Guilty	Happy	Ignored
Intelligent	Jealous	Lonely	Neutral
Peaceful	Proud	Relaxed	Sad
Stupid	Self-conscious		

- |  |                          |
|--|--------------------------|
| 1. I'm disgusted by _____                    | This makes me feel _____ |
| 2. When I lie _____                          | This makes me feel _____ |
| 3. A good looking person _____               | This makes me feel _____ |
| 4. When I hurt someone else's feelings _____ | This makes me feel _____ |

## RESULTS

### CHILD SAMPLE

There were no significant age differences in scores for internalization or externalization from the CBCL's. One significant age difference was found for the emotion scores ( $p < .02$ ). Children scored higher on the projective measure of guilt with increasing age ( $M$ 's = 4.41, 5.22, 5.35, 7.27 for children whose mean ages in years and months were 5.9, 8.1, 9.9, and 11.7, respectively).

Importantly, the two scores for guilt-proneness derived from the semi-projective and scenario-based instruments were virtually uncorrelated ( $r = -.09$ ). Shame-proneness derived from the scenario measure was significantly correlated with both the semi-projective and scenario measure of guilt-proneness ( $r$ 's = .57 and .31,  $p$ 's < .05)

A canonical correlation analysis was conducted on the children's three emotion scores (projective guilt, nonruminative guilt, and shame) in relation to parent- and child-reported symptoms of internalization and externalization as assessed using the CBCL.

This analysis resulted in one significant canonical function (Wilk's  $\Lambda = 1.74$ ,  $p < .05$ ) that accounted for 20.4% of the variance. Structure and function coefficients for this analysis are shown in Table 1.

Table 1

	Structure Coefficients	Function Coefficients
<i>Emotion Variables</i>		
Projective Guilt	0.59	0.38
Nonruminative Guilt	-0.31	-0.83
Shame	0.55	0.96
<i>CBCL Variables</i>		
Parent Internalization	0.22	0.01
Parent Externalization	0.18	0.15
Child Internalization	0.22	0.21
Child Externalization	0.55	0.57
Child Age in Months	0.73	0.83

Table 1 shows that:

- Projective guilt and shame were positively related to one another and contrasted with negative loadings for nonruminative guilt.
- Child-reported externalization is positively related to age.
- The tendency to express projective guilt and shame are positively related to child-reported externalization and age.
- Although internalization is positively correlated with the tendency to express projective guilt and shame, these correlations fall short of the commonly accepted value of .30.

We conclude that nonruminative guilt in children 5-12 years of age is not related to symptoms of psychopathology. Projective guilt and shame are, however, concurrently predictive of externalizing symptoms.

## ADULT SAMPLE

The scenario measure of nonruminative guilt-proneness and shame-proneness (TOSCA) was analyzed separately from the sentence completion measure of guilt and shame (ASC).

Again using canonical correlation procedures, guilt and shame scores from each instrument were analyzed in relation to the two available indices of psychopathology, viz., the SCL-90-R and selected scales from the MMPI-2. This resulted in four sets of canonical correlation analyses as summarized in Tables 2 through 4.

### TOSCA in Relation to SCL-90-R

One significant function resulted from the analysis relating TOSCA guilt and shame scores to SCL-90-R symptom scores (Wilk's lambda = 7.59,  $p < .001$ ) and accounted for 41% of the variance. Results are shown in Table 2.



Table 2

	Structure Coefficients	Function Coefficients
<i>Emotion Variables (from TOSCA)</i>		
Nonruminative Guilt	0.57	0.25
Shame	0.97	0.88
<i>SCL-90-R Scales</i>		
Depression	0.95	1.03
Anxiety	0.83	-0.47
Hostility	0.56	0.35

Table 2 shows that:

- Both nonruminative guilt and shame load highly on the emotion variate, although the function coefficient for nonruminative guilt contributes much less to prediction of respondents' scores than does shame-proneness
- Depression, anxiety, and hostility are positively interrelated and they load very highly on the symptom variate.
- Shame especially is the emotion variable relating positively to symptoms of internalization and externalization

#### TOSCA in Relation to MMPI

Two significant functions resulted from the analysis relating TOSCA guilt and shame scores to MMPI symptom scores (Wilk's lambda 2nd root = 2.72,  $p < .04$ ). The first and second functions accounted for 40% and 12% of the variance, respectively, and are reported in Table 3.

Table 3

	First Structure Coefficients	First Function Coefficients	Second Structure Coefficients	Second Function Coefficients
<i>Emotion Variables (from TOSCA)</i>				
Nonruminative Guilt	0.07	-0.39	0.99	1.03
Shame	0.94	1.01	0.35	-0.07
<i>MMPI Scales</i>				
Obvious Depression	0.69	-0.13	0.15	0.02
Anxiety	0.86	0.61	0.25	1.25
Anger	0.59	0.22	0.05	-0.68
Amorality	-0.01	-0.12	-0.51	-0.79
Ego Strength	-0.78	-0.56	0.37	0.89



Table 3 shows that:

- Shame loads exclusively on the first function. On the same function, symptoms of depression, anxiety, and anger load positively, whereas high scores for ego strength load negatively.
- Guilt accounts for most of the variance on the second function (shame also loads on this function, but has a negligible function coefficient). On the same function, there is a high negative loading for amorality, but a positive loading for ego strength.
- It appears, then, that shame in adults is associated with symptoms of psychopathology and is inversely related to a general index of adjustment. The opposite is true for guilt, which clearly is related to ego strength and low scores for amorality.

#### Projective Measures of Guilt and Shame in Relation to SCL-90-R

One significant canonical function was found in this analysis (Wilk's lambda = 2.26,  $p < .04$ ), accounting for 13% of the variance, as seen in Table 4.

**Table 4**

	Structure Coefficients	Function Coefficients
<i>Emotion Variables (Sentence Completion Task)</i>		
No. Guilt Responses	0.39	0.11
No. Shame Responses	0.99	0.96
<i>SCL-90-R Scales</i>		
Depression	0.99	0.99
Anxiety	0.76	-0.18
Hostility	0.81	0.19

Table 4 shows that:

- Shame especially loads on this function (although guilt also loads highly, its function coefficient adds little to the prediction of respondents' scores).
- All three symptoms load positively, although depression is clearly the most important symptom in predicting respondents' scores on the symptom variate.
- It appears that a projective measure of shame is highly related to symptoms, especially that of depression.

#### Projective Measures of Guilt and Shame in Relation to MMPI

One significant canonical function was found in this analysis (Wilk's lambda = 4.81,  $p < .001$ ), accounting for 35% of the variance, as seen in Table 5.

Table 5

	Structure Coefficients	Function Coefficients
<i>Emotion Variables</i> (Sentence Completion Task)		
No. Guilt Responses	0.79	0.52
No. Shame Responses	0.88	0.67
<i>MMPI-2 Scales</i>		
Obvious Depression	0.81	0.19
Anxiety	0.89	0.48
Anger	0.89	0.32
Amorality	0.41	-0.01
Ego Strength	0.44	0.29

In this analysis, the number of guilt and shame responses on the ASC were highly positively correlated.

The MMPI-2 scales were also all highly interrelated. However, inspection of function coefficients for the MMPI-2 scales suggests that primarily anxiety (and, to a lesser extent, anger and ego strength) are of importance in predicting respondents' scores.

## CONCLUSIONS

At least as operationalized in the current study, there are few indications that nonruminative forms of guilt-proneness are related to psychological symptoms in either adults or children. In fact, if anything, nonruminative guilt in adults is related to greater ego strength and lesser signs of amorality. These findings replicate those reported by other researchers (e.g., Bybee & Williams, 1995; Bybee, Williams, & Merisca, 1994; Tangney et al., 1995). However, it would be premature to conclude that guilt is primarily adaptive in nature, since we also found that projective indicators of guilt were related to a tendency to internalize and especially to externalize in both adults and children. Projective indicators of guilt were also related strongly to shame-proneness, which itself was a salient variable in predicting to externalizing symptoms in both children and adults. The predictive power of shame-proneness in relation to clearly visible psychological symptoms was high for both projective (available for adults only) and self-report (available for children and adults) measures of this construct. Especially interesting is the tendency for shame-proneness to be highly positively associated with indices of hostility, which is consistent with H.B. Lewis' (1971) notion that shame and rage often combine to form a kind of humiliated fury, which can subsequently perpetuate feelings of guilt. H.B. Lewis saw rage as an initial defensive reaction to feelings of shame, which was meant to protect the individual from further psychological onslaughts. She also noted, however, that the defense of rage might not always be successfully deployed, since the environment frequently disavows responses of anger, especially in females (Lewis, 1989), and the individual often ends up feeling guilty for lashing out at her environment. In this respect, it is interesting to speculate that overt expressions of anger would be even more strongly related to less transparent (projective) than more transparent (self-report) measures of shame and guilt with increasing age, especially for females. It is also possible that recurrent feelings of shame or guilt become more strongly related to symptoms of depression with increasing

age, also especially for females. Although we could not examine the possibility of sex-related differences in these relationships because of the small sample size, we did present evidence that internalizing symptoms became more strongly related to guilt and especially shame with increasing age in a sample that consisted of twice as many females as males. There are a variety of explanations for this shift with age -- one of which is that the individual's environment (e.g., parents, teachers, and peers) becomes increasingly less tolerant of extra- as opposed to introjective defenses against shame. We recommend that future work in this area : (a) incorporate both projective and nonprojective measures of these painful emotions, (b) provide more systematic and theoretically-grounded tests of sex differences in the relations between emotion and symptoms, and (c) attend more to the implicit dialogue that seems to be taking place between the individual and his/her environment in expressing and defending against the two emotions.

## REFERENCES

- Achenbach, T. M., McConaughy, S. H., & Howell, C. T. (1987). Child/adolescent behavioral and emotional problems: Implications of cross-informant correlations for situational specificity. Psychological Bulletin, 101(2), 213-232.
- Bybee, J., & Williams, C. (1995). When is guilt adaptive? Relationships to prosocial behavior, academic and social strivings, and mental health. Manuscript submitted for publication.
- Bybee, J., Williams, C., & Merisca, R. (1994, August). Greater guilt is related to prosocial, academic and socioemotional competence. Poster presented at the annual convention of the American Psychological Association, Los Angeles, CA.
- Barrett, K. C. (1995). A functionalist approach to shame and guilt. In J. P. Tangney and K. W. Fischer (Eds.), Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride. New York: Guilford Press.
- Crowley, S. L., & Anderson, J. B. (1993, August). The relationship between guilt- and shame-proneness and family functioning. Paper presented at the annual meeting of the American Psychological Association, Toronto, Canada.
- Crowley, S. L., & Ferguson, T. J. (1994, April). Guilt revisited: Ruminative guilt and its relationship to shame. Poster presented at the annual meeting of the Western Psychological Association, Kona, HI.
- Derogatis, (1983). SCL-90-R manual. St. Petersburg, FL: Clinical Psychometrics.
- Ferguson, T. J., Sorenson, C., & Eyre, H. (1996). The Affective Sentence Completion Test. Unpublished instrument. Utah State University.
- Ferguson, T. J., & Stegge, H. (1995). Emotional states and traits in children: The case of guilt and shame. In J. P. Tangney and K. W. Fischer (Eds.), Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride. New York: Guilford Press.
- Lewis, H. B. (1971). Shame and guilt in neurosis. New York: International Universities Press.
- Lewis, H. B. (1989). Some thoughts on the moral emotions of shame and guilt. In L. Cirillo, B. Kaplan, & S. Wapner (Eds.), Emotions in ideal human development. Hillsdale, NJ: Erlbaum.
- Lewis, M. (1992). Shame, the exposed self. New York: Free Press.
- Magai, C., & McFadden, S. H. (1995). The role of emotions in social and personality development: History, theory, and research. New York: Plenum.
- Malatesta, C. Z., & Wilson, A. (1988). Emotion cognition interaction in personality development: A discrete emotions, functionalist analysis. British Journal of Social Psychology, 27, 91-112.
- Scheff, T. J. (1988). Shame and conformity: The deference-emotion system. American Sociological Review, 53, 395-406.
- Stegge, H., & Ferguson, T. J. (1990). Child-Child Attribution and Reaction Survey (C-CARS). Unpublished instrument, Utah State University.
- Tangney, J. P., Burckgraf, S. A., & Wagner, P. E. (1995). Shame-proneness, guilt-proneness, and psychological symptoms. In J. P. Tangney and K. W. Fischer (Eds.), Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride. New York: Guilford Press.
- Tangney, J. P., Wagner, P. E., & Gramzow, R. (1989). The Test of Self-Conscious Affect. Fairfax, VA: George Mason University.
- Zahn-Waxler, C., & Kochanska, G. (1990). The origins of guilt. In R. Thompson (Ed.), Nebraska symposium on motivation: Vol. 36. Lincoln: University of Nebraska Press.
- Zahn-Waxler, C., Kochanska, G., Krupnick, J., & Mayfield, A. (1988). Coding manual for Children's Interpretations of Interpersonal Distress and Conflict. Laboratory of Developmental Psychology, National Institute of Mental Health.



U.S. Department of Education  
Office of Educational Research and Improvement (OERI)  
Educational Resources Information Center (ERIC)



# REPRODUCTION RELEASE

(Specific Document)

## I. DOCUMENT IDENTIFICATION:

Title: (Dys)functional Guilt and Shame in Developmental Perspective	
Author(s): Tamara J. Ferguson, Corinna Sorenson, Rebecca Bodrero, & Hedy Stegge	
Corporate Source:	Publication Date:

## II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.

The sample sticker shown below will be  
affixed to all **Level 1** documents



Check here  
**For Level 1 Release:**  
Permitting reproduction in  
microfiche (4" x 6" film) or  
other ERIC archival media  
(e.g., electronic or optical)  
and paper copy.

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL  
HAS BEEN GRANTED BY

\_\_\_\_\_  
*Sample*  
\_\_\_\_\_

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

**Level 1**

The sample sticker shown below will be  
affixed to all **Level 2** documents



Check here  
**For Level 2 Release:**  
Permitting reproduction in  
microfiche (4" x 6" film) or  
other ERIC archival media  
(e.g., electronic or optical),  
but not in paper copy.

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS  
MATERIAL IN OTHER THAN PAPER  
COPY HAS BEEN GRANTED BY

\_\_\_\_\_  
*Sample*  
\_\_\_\_\_

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

**Level 2**

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at **Level 1**.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature: <i>T. J. Ferguson</i>	Printed Name/Position/Title: Tamara J. Ferguson/Assoc. Prof./Psychology	
Organization/Address: Department of Psychology Utah State University Logan, UT 84322-2810	Telephone: (801) 797-3272	FAX: (801) 797-1448
	E-Mail Address: uf734@cc.usu.edu	Date: 09/23/96

XIVth Biennial Meetings of the International Society for the Study of Behavioural Development (Quebec City, Quebec, August 12-16, 1996).

### III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

### IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

### V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

KAREN E. SMITH  
ACQUISITIONS COORDINATOR  
ERIC/EECE  
805 W. PENNSYLVANIA AVE.  
URBANA, IL 61801-4897

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility  
1100 West Street, 2d Floor  
Laurel, Maryland 20707-3598

Telephone: 301-497-4080

Toll Free: 800-799-3742

FAX: 301-953-0263

e-mail: [ericfac@inet.ed.gov](mailto:ericfac@inet.ed.gov)

WWW: <http://ericfac.piccard.csc.com>